

Application No.: 09/808,732  
Amendment Dated November 13, 2003  
Reply to Office Action Mailed May 13, 2003

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A matrix comprising solid space solid metal oxide particles in physical contact with each other and interstitial space wherein said interstitial space comprises an comprising a cross-linked interstitial polymer network covalently attached to said particles which forms an integrated contiguous network which spans the particles and which further comprises comprising a functional group comprising a member of a binding pair.

Claims 2-5 (cancelled).

Claim 6 (currently amended): The matrix of claim 2 1 wherein said interstitial polymer network further comprises a tether molecule.

Claim 7 (currently amended): The matrix of claim 2 1 wherein said solid support further comprises a blocking reagent.

Claims 8-11 (cancelled).

Claim 12 (currently amended): The matrix of claim 4 26 wherein said reactive moiety comprises a chemical catalyst, an enzyme or a chemical reagent.

Claims 13-25 (cancelled).

Claim 26 (currently amended): A matrix comprising solid space and interstitial space wherein said interstitial space comprises an interstitial polymer network comprising a functional group comprising a reactive moiety. A matrix comprising solid metal oxide particles in physical contact with each other and an interstitial space comprising a cross-linked interstitial polymer

Application No.: 09/808,732  
Amendment Dated November 13, 2003  
Reply to Office Action Mailed May 13, 2003

network covalently attached to said particles which forms an integrated contiguous network which spans the particles and which further comprises a functional group comprising a reactive moiety.

Claim 27 (new): The matrix of claim 26 wherein said interstitial polymer network further comprises a tether molecule.

Claim 28 (new): The matrix of claim 26 wherein said solid support further comprises a blocking reagent.